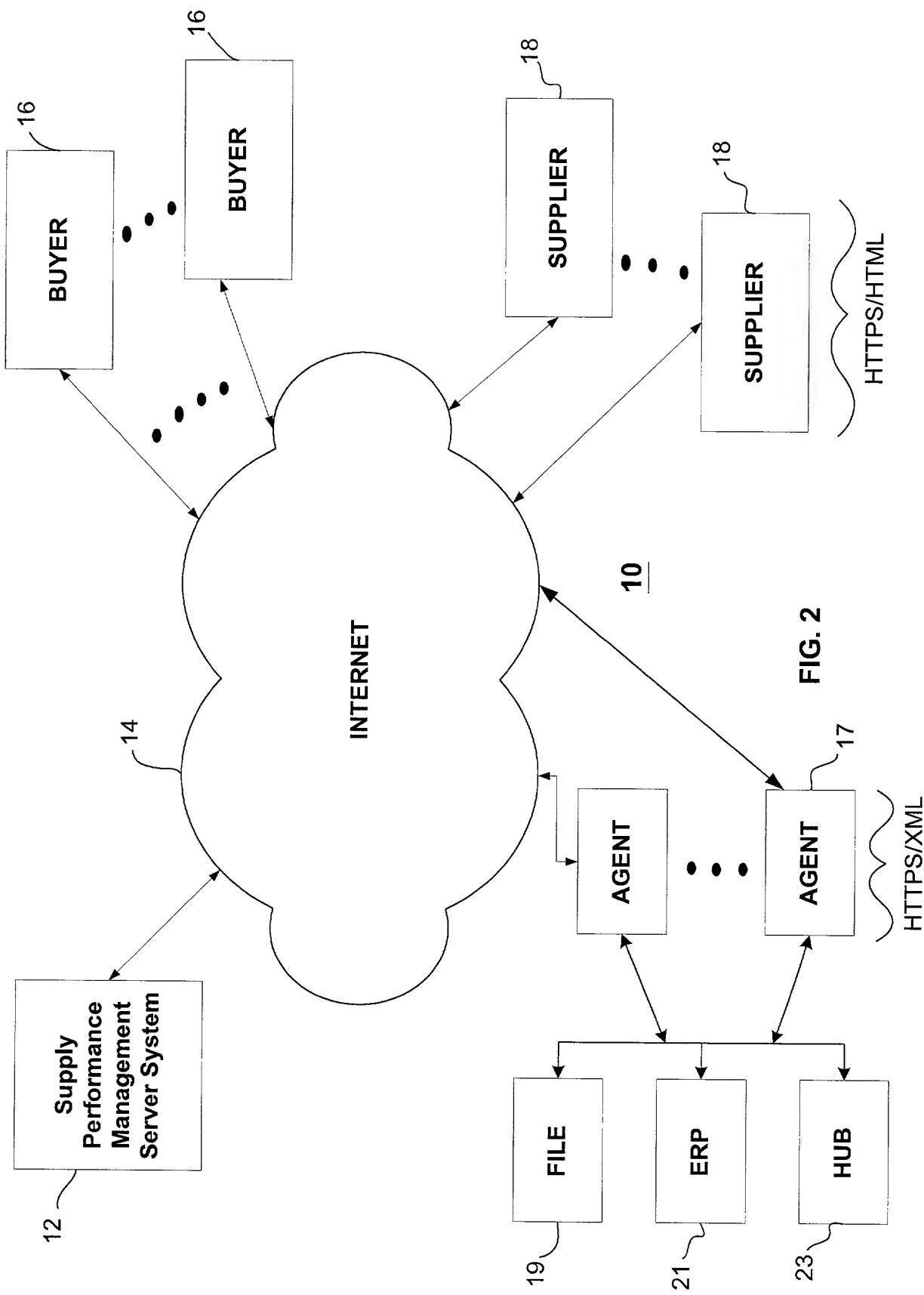


Figure 1

Supply chain management system based on distributed agent architecture



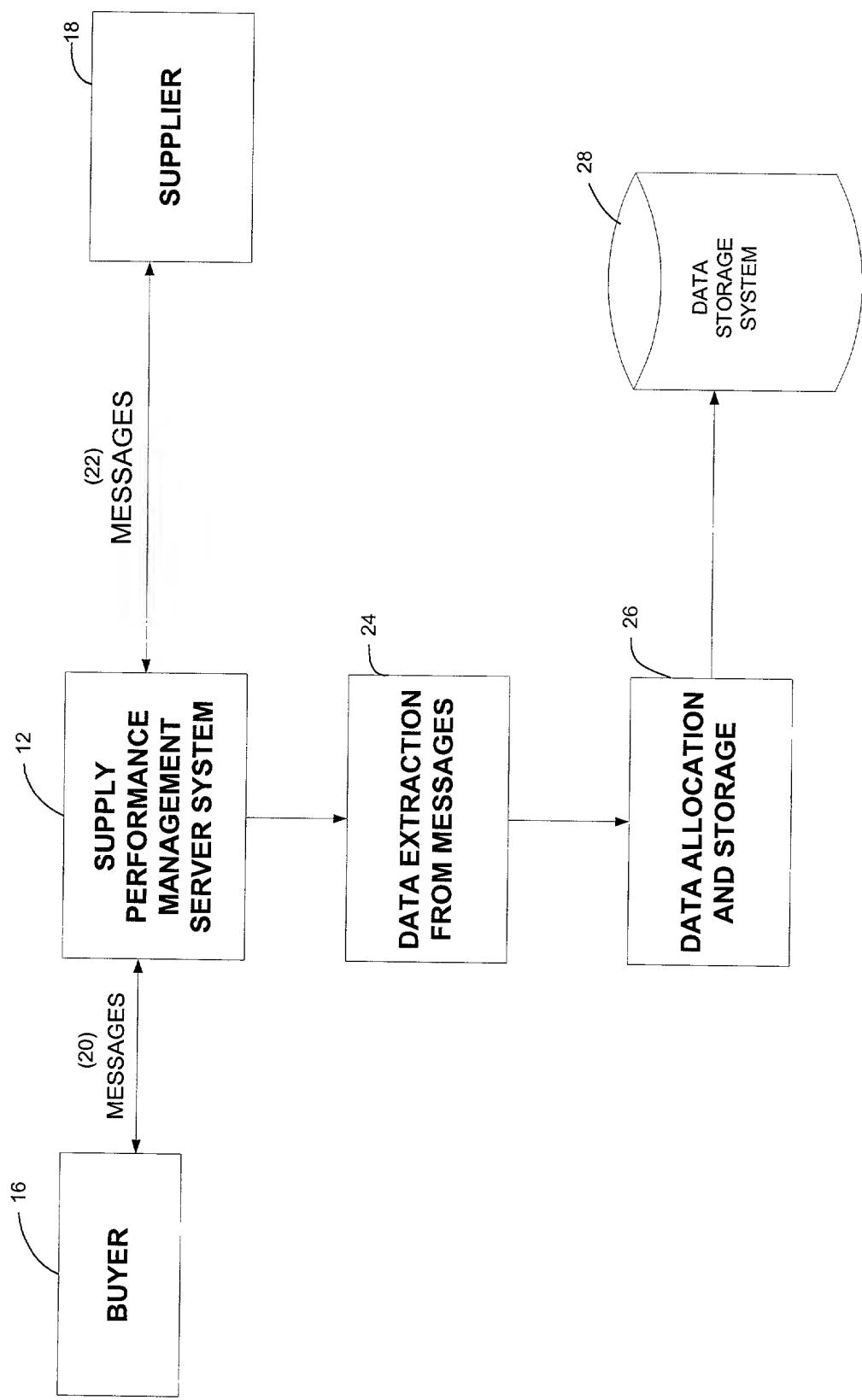
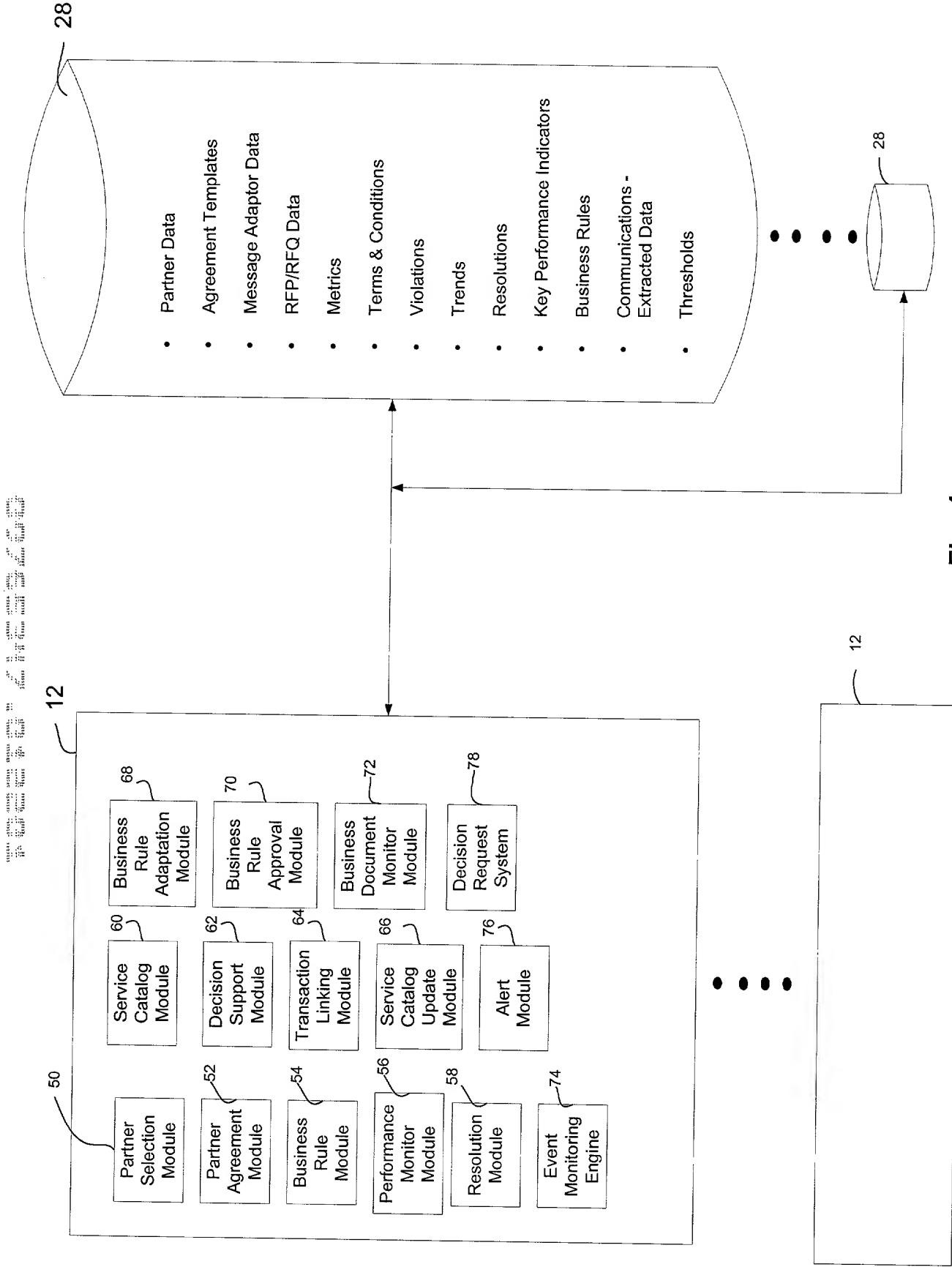


Fig. 3

Fig. 4



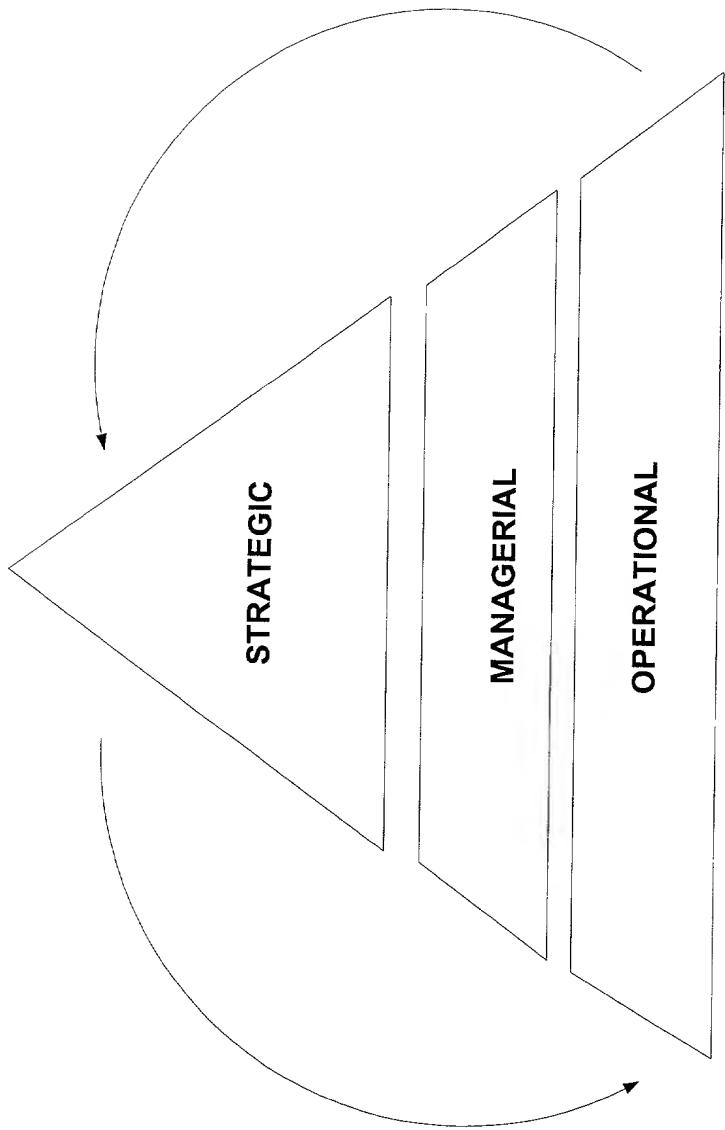


FIG. 5

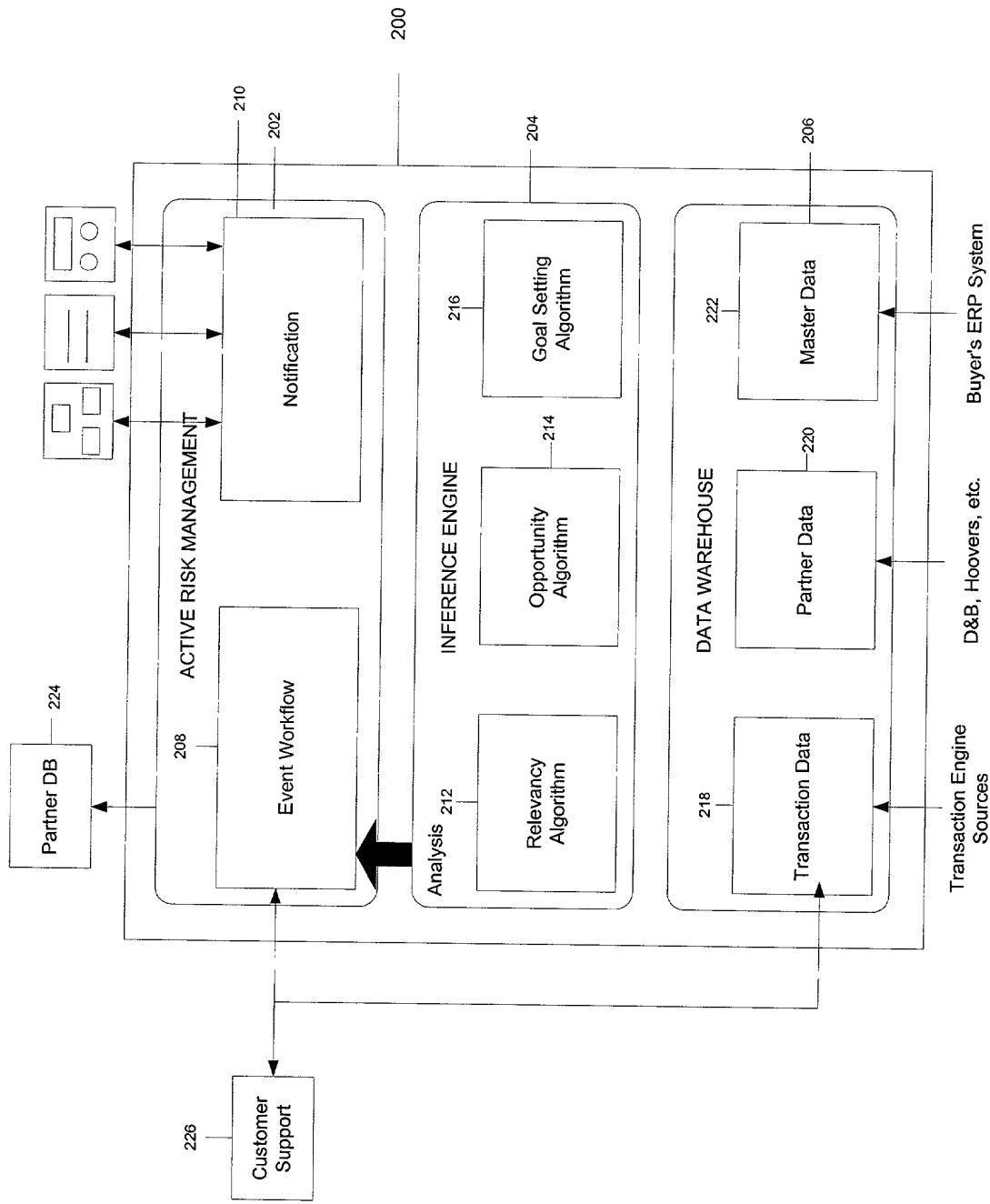


Figure 6

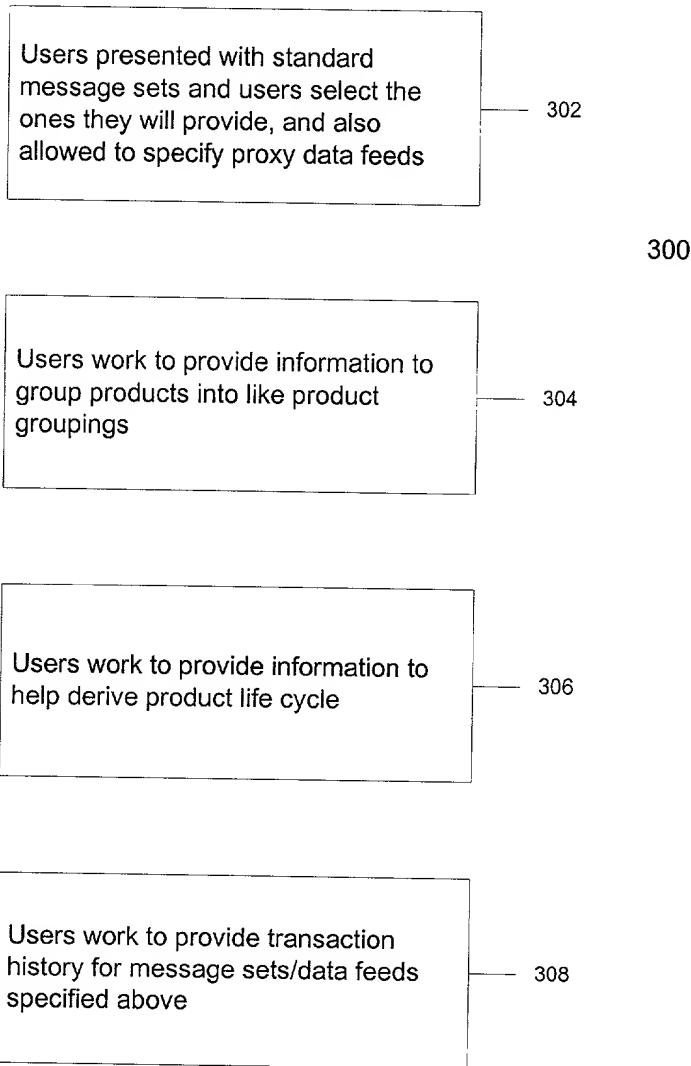


Figure 7

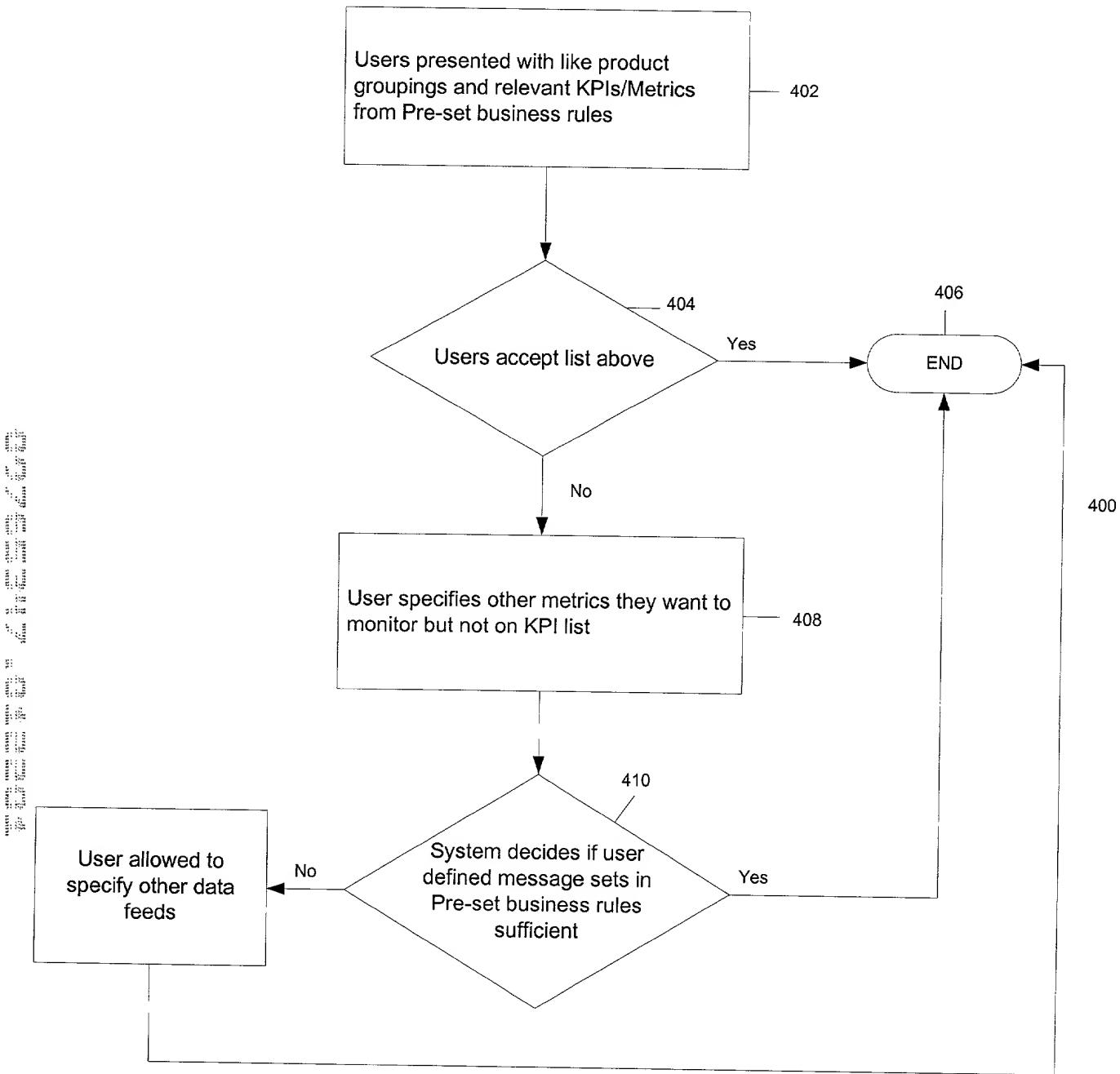


Figure 8

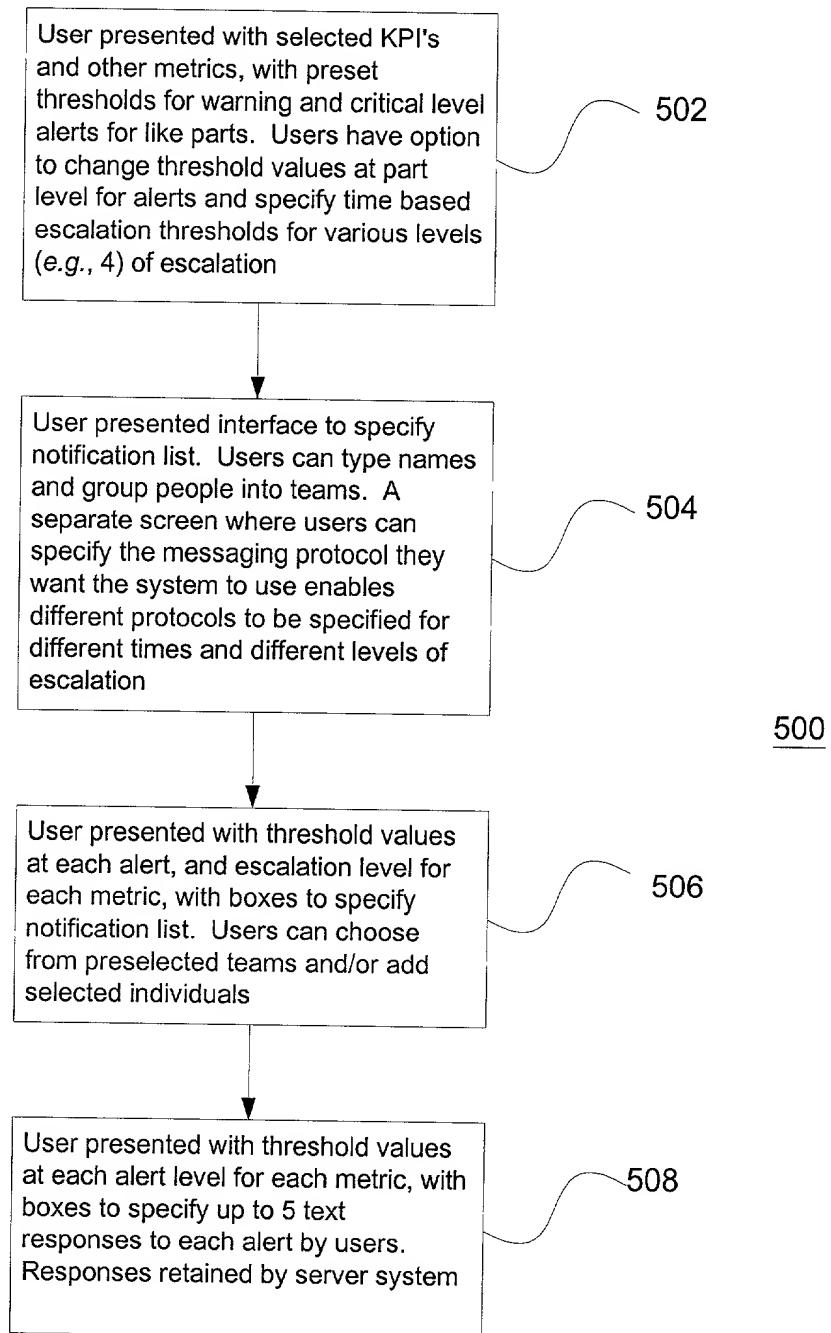


Fig. 9

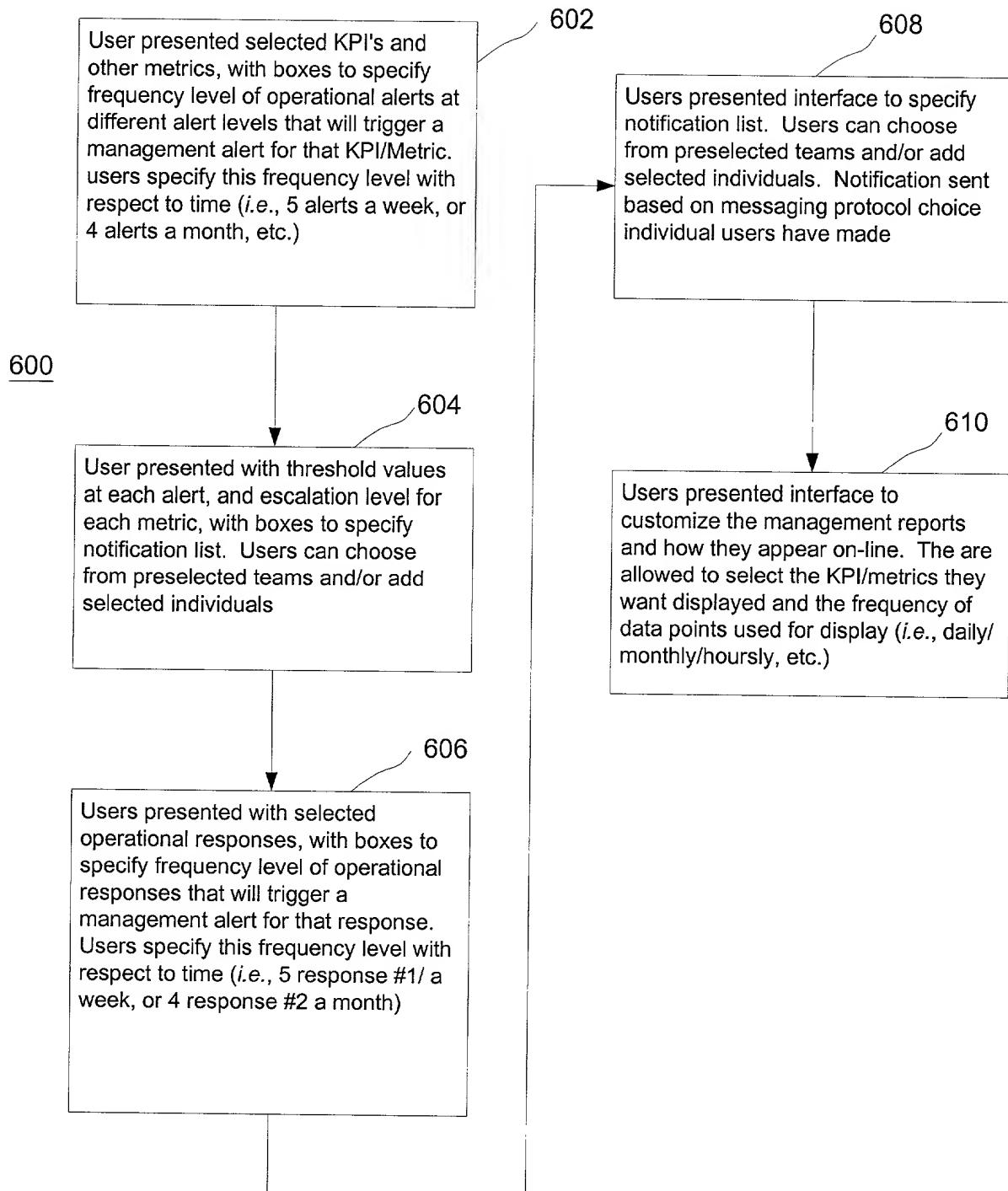


Fig. 10

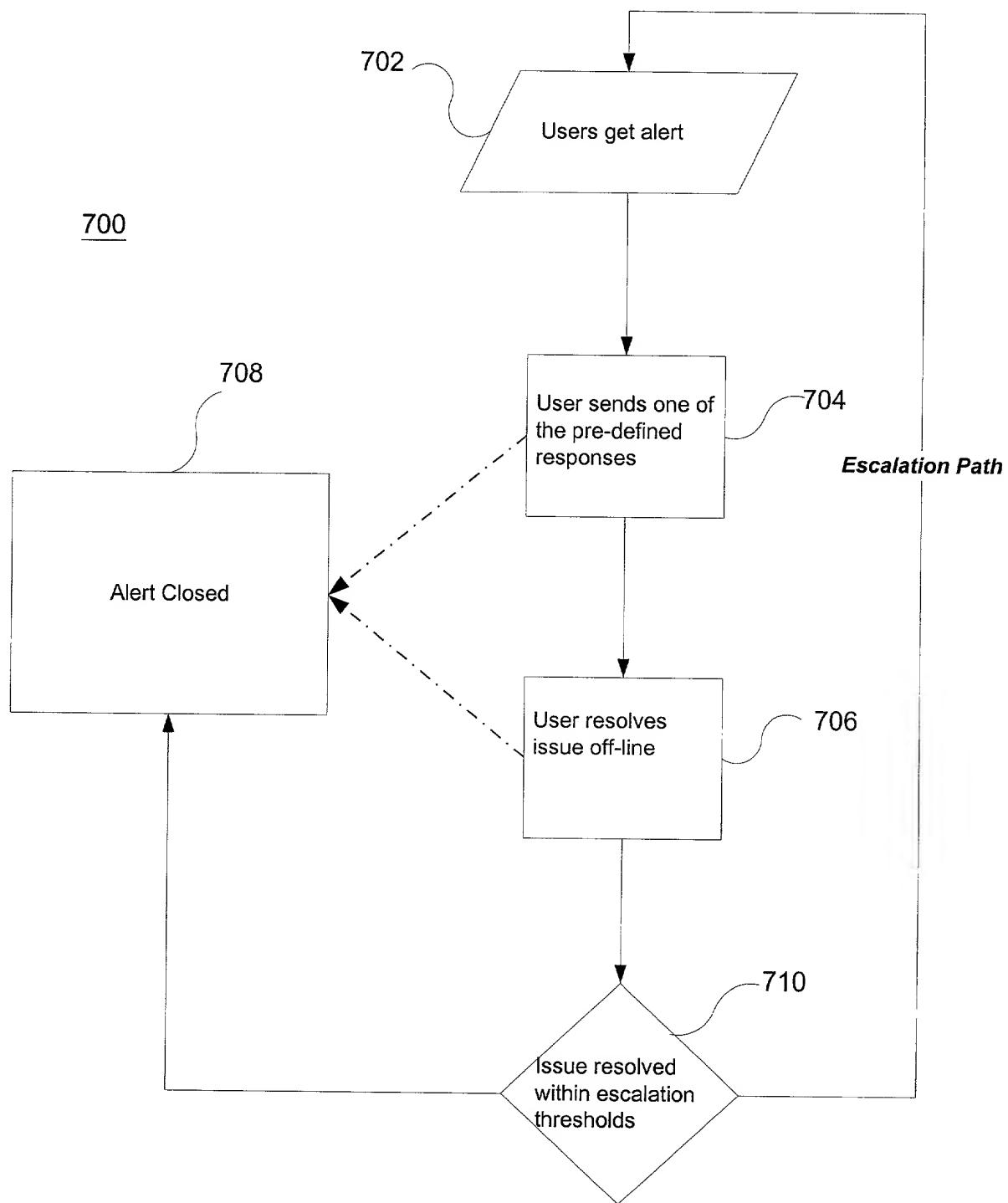


Fig. 11

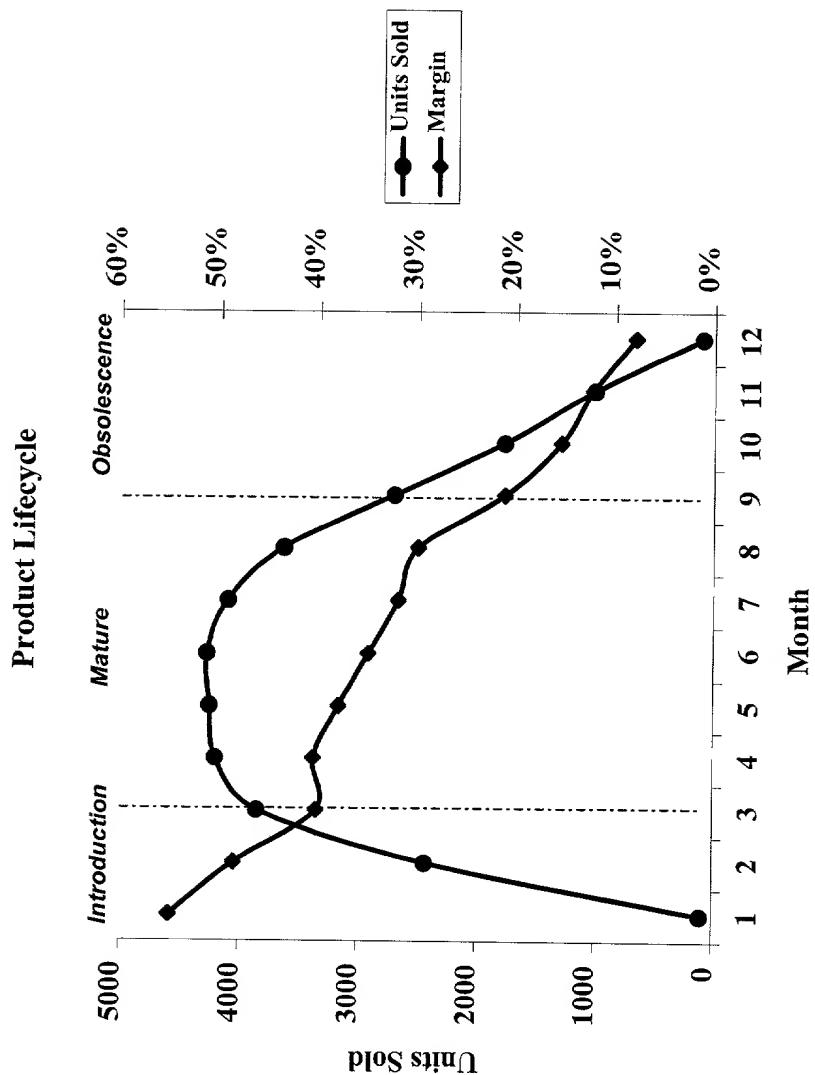
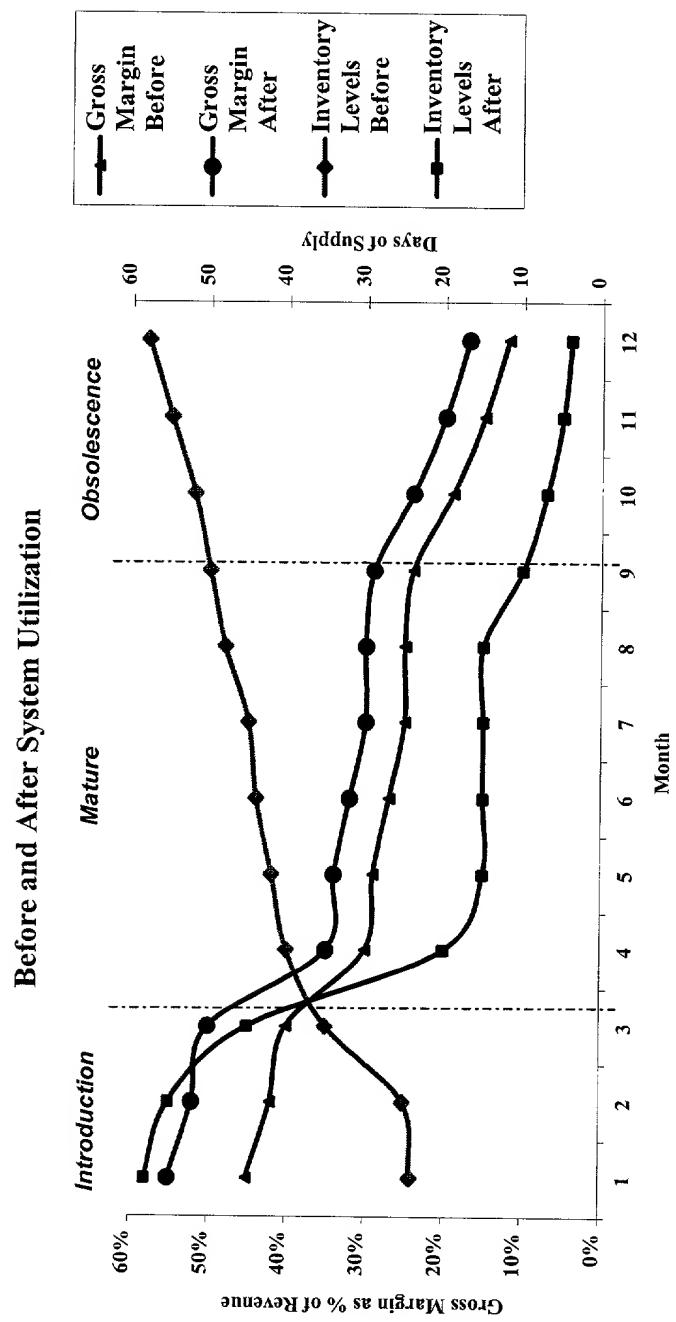


Fig. 12

Fig. 13



KPI's		User Defined/Other Elements	
Tradeoff service level vs. cost	X		Product standard cost
Confidence Factor	X	X	Product lifecycle
Tradeoff customer service levels vs. channel inventory levels		X	Product lifecycle, Product standard cost
Rank and manage partner performance	X	X	Industry benchmarks, User defined composite metrics
Tradeoff Cash-to-Cash vs. service level and inventory		X	Payment cycle time information

Fig. 14(a)

Details	
Analytics	Inputs
Analytic Packs	
Tradeoff service level vs. cost	Allow users to view tradeoffs between forecast accuracy, level of inventory, cost and service levels. This lets users set policy that optimizes the relationship between these 3 variables, allowing users to set inventory levels that minimizes cost while achieving desired service levels. Also lets users to specify policy based on product lifecycle profiling, allowing different policy to be set for different products with system recommendations around which KPI to optimize based on lifecycle stage (Service level at introduction, Inventory levels at obsolescence)
Confidence Factors	Allow users to see the degree of reliability and accuracy of partner and network commitments based on product lifecycle. This lets them make allowances in their goal/threshold setting to take into account a perceived degree of inaccuracy/variance
Tradeoff customer service levels vs. channel inventory levels	Allow users to view tradeoffs between customer service levels and levels of inventory taking into account the product lifecycle. Allows users to set goals that achieve desired customer service levels while minimizing amount of inventory that needs to be carried. Also alert users when goals set are not appropriate based on product lifecycle stage
Rank and manage partner performance	Allow users to see and compare partner performance across the supply-chain network and also across industry benchmarks
confidence Factors	Allow users to see how changing service levels and inventory levels affects the csh-to-cash cycle time. Allows users to set goals across the other 2 metrics to minimize the cash-to-cash cycle time

Fig. 14(b)

Message Sets		Analytics	
KPI's			
Forecast Accuracy	X	X	X
Forecast Variance	X		
Service Level	X	X	X
Days of Supply	X	X	X
On-time-ship	X	X	X
On-time-delivery	X	X	X
Perfect Order	X	X	X
Fill Rate	X	X	X

Message Sets:

- Invoice (810)
- Material Release (853)
- PO/ack (850)
- Q (846)
- Inventory Report (830)
- Forecast (830)
- Order (830)
- Material Notification (820)
- Delivery (862)
- Partymet (810)
- Advice (820)
- Advantage Ship Notice (856)
- Receipt Advice (861)

Analytics:

- Tradeoff analysis between service levels and cost. Set confidence levels based on past performance and product lifecycle phase.
- Highlights reliability and predictability of forecasting process. Set confidence levels based on product lifecycle phase and past partner performance.
- Tradeoff analysis of lost revenue vs. higher inventory carrying costs. Set smart goals by product based on lifecycle profiling.
- Minimize inventory levels when comfortable with forecast variability. Accelerate inventory turns by dynamically adjusting goals based on product lifecycle and past performance of partners.
- Improve customer satisfaction and retention by actively managing tradeoffs between customer service levels and channel inventory levels. Set aggressive, achievable goals by product based on lifecycle phase.
- Improve customer satisfaction and retention by actively managing tradeoffs between customer service levels and channel inventory levels. Set aggressive, achievable goals by product based on lifecycle phase.
- Actively manage partner service level and effectiveness, to create a superior customer experience. Focus management attention on "hot spots" with Maturity pattern matching technology.
- Actively manage partner service level and effectiveness, to create a superior customer experience. Use to rank and drive partner performance.

Fig. 14(c)

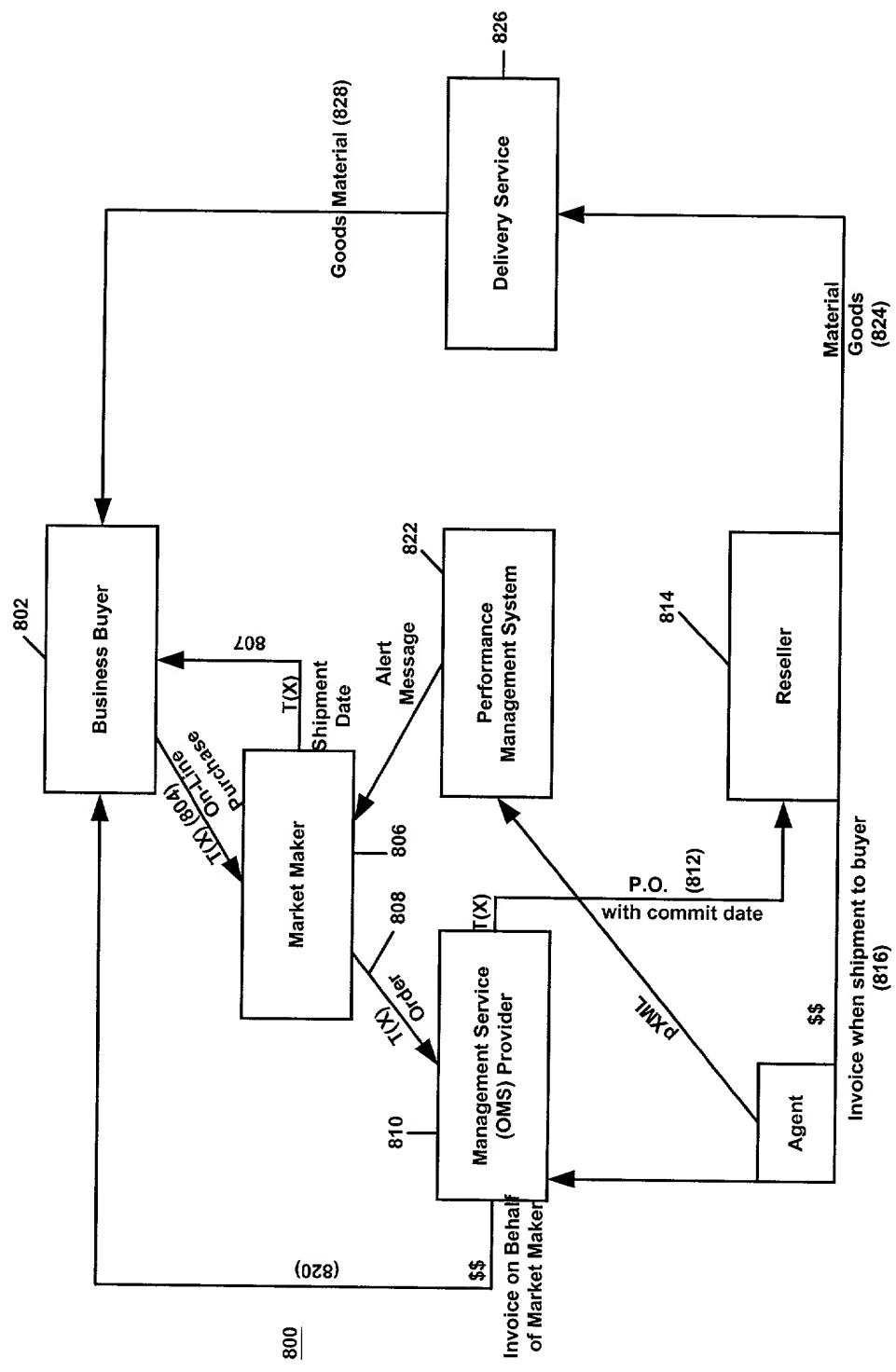
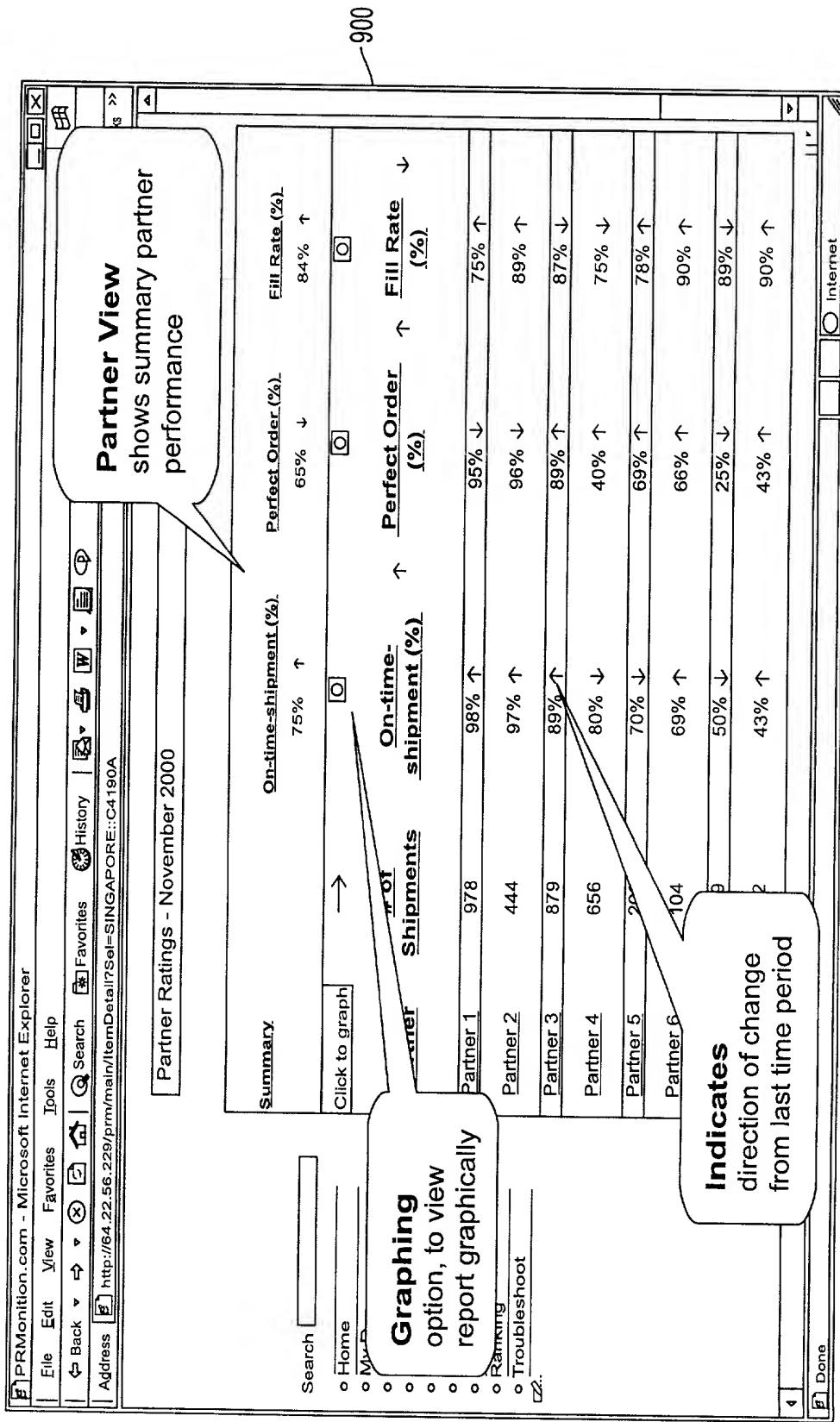


Figure 15

FIG. 16



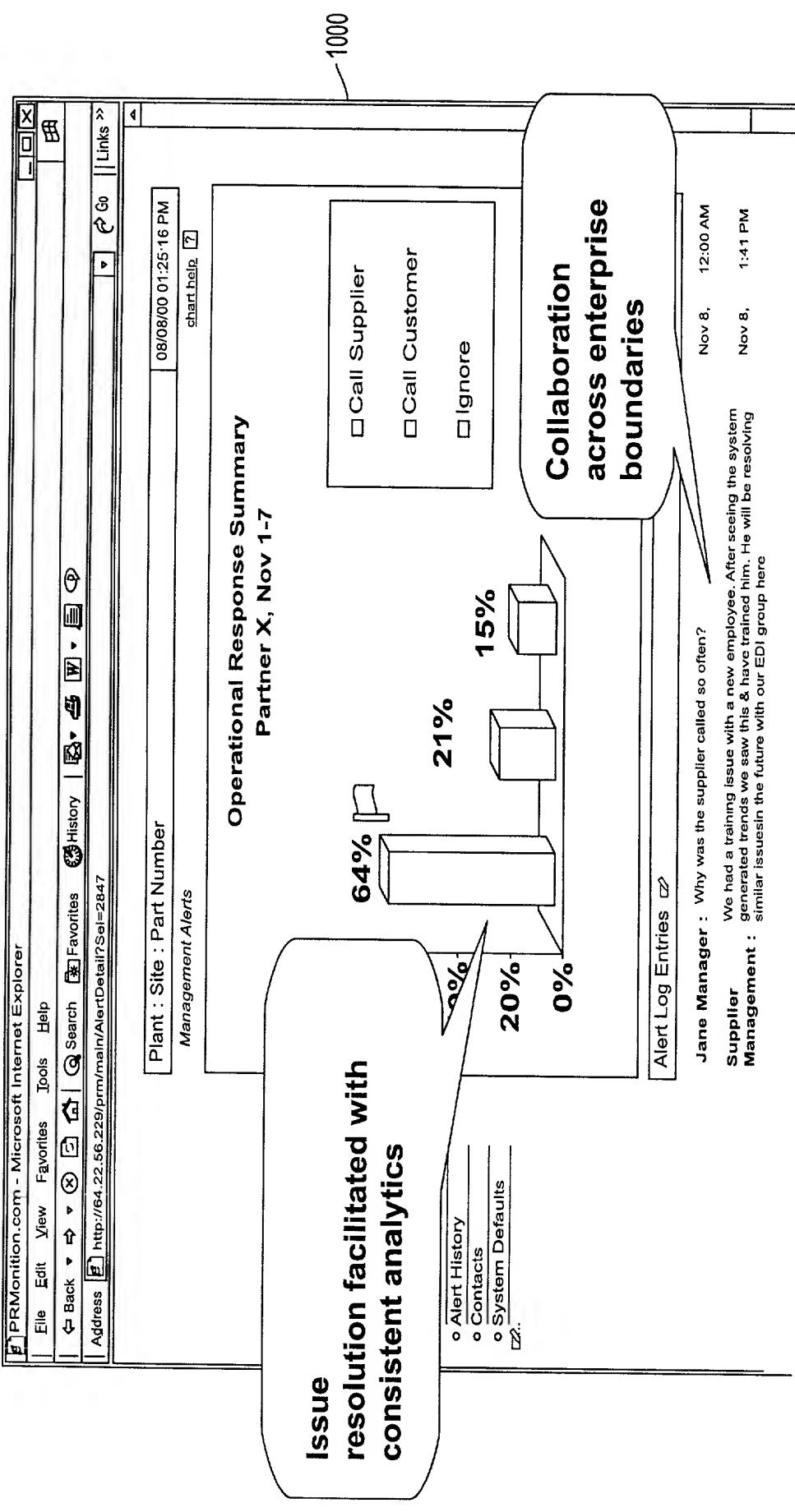


FIG. 17

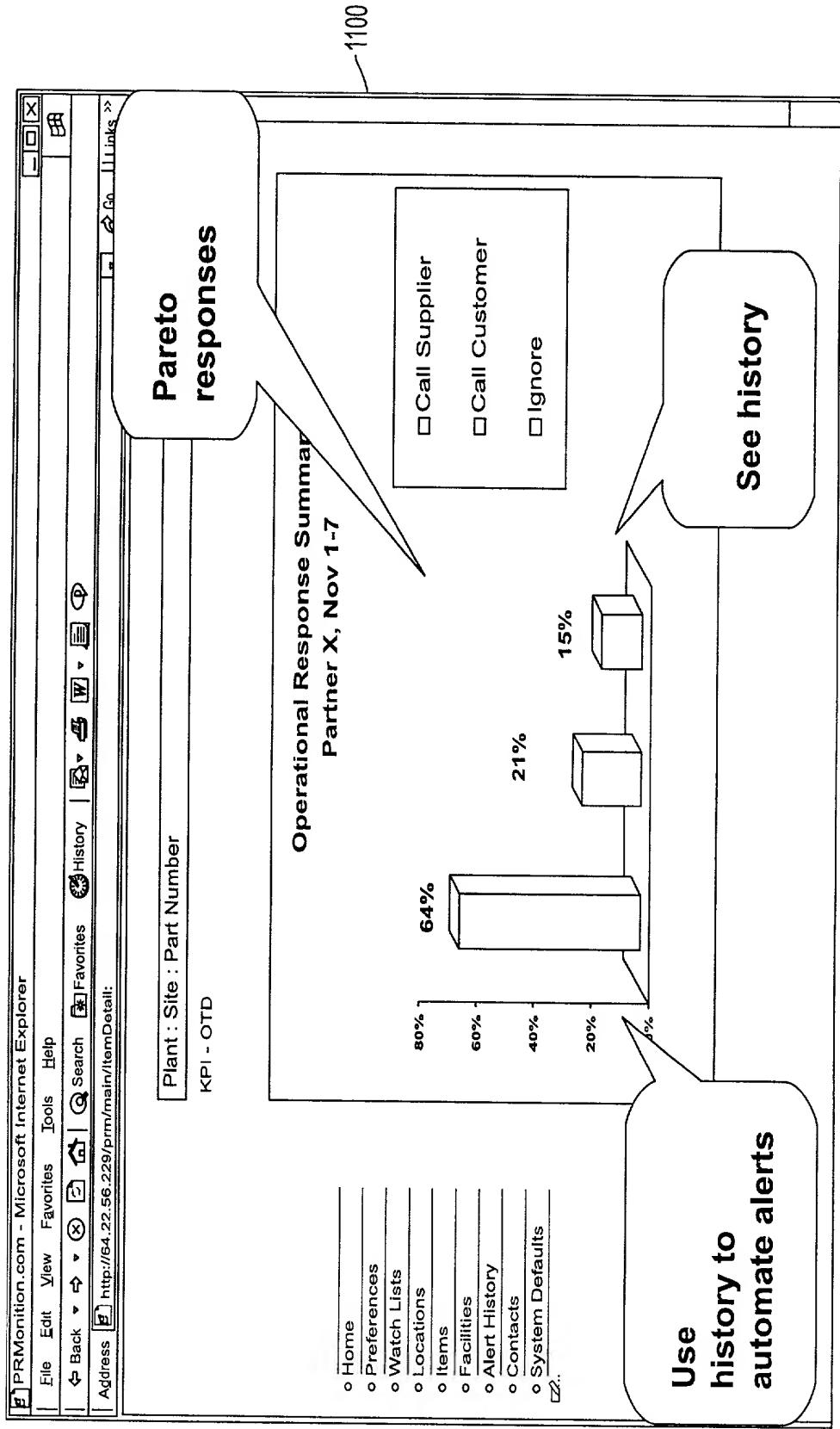


FIG. 18

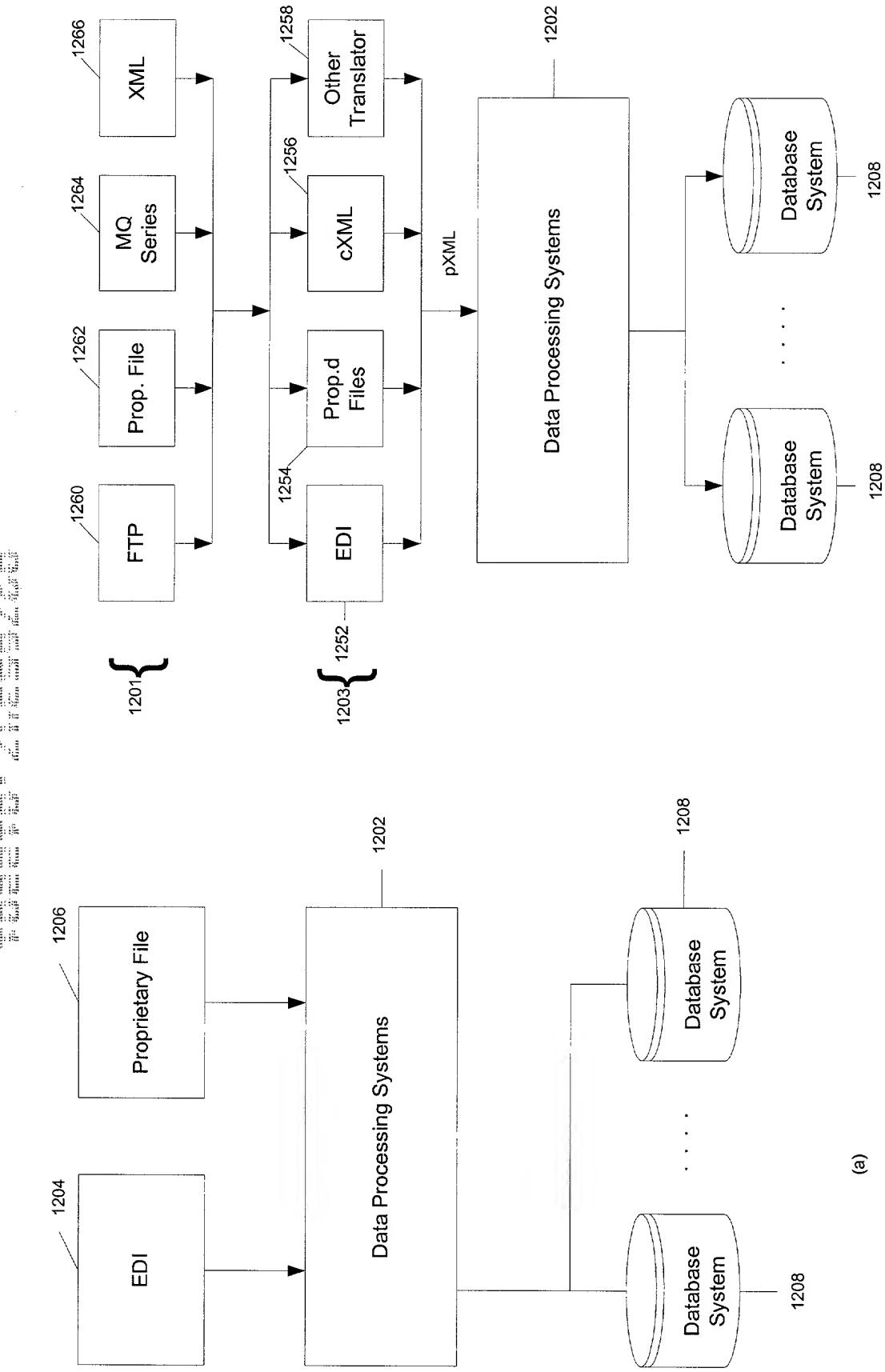


Figure 10 (b)

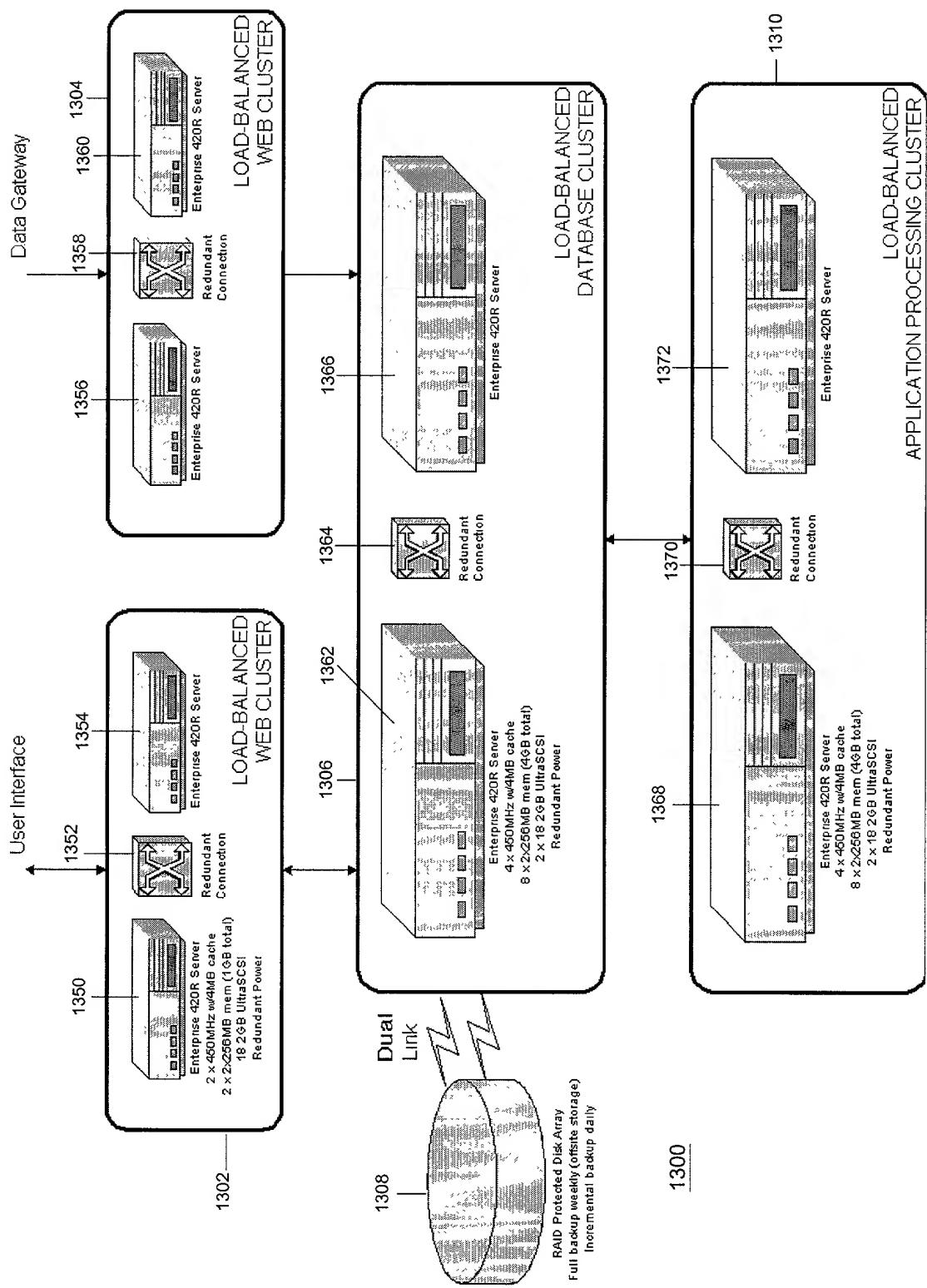


Fig. 20